



**APPLICATION FOR AUTHORIZATION TO DISCHARGE DREDGED
OR FILL MATERIAL TO ISOLATED WETLANDS AND/OR
WATERS OF THE STATE**

State Form 51821 (R2 / 11-15)

Indiana Department of Environmental Management

- INSTRUCTIONS:** 1. Read the instruction sheet before filling out this form.
2. You must complete all applicable sections of this form

1. Applicant Information		2. Agent Information	
Name of Applicant Indiana Dunes State Park		Name of Agent N/A	
Mailing address (Street/ PO Box/ Rural Route, City, State, ZIP Code) 1600 North 25 East, Chesterton, IN 46304		Mailing address (Street/ PO Box/ Rural Route, City, State, ZIP Code) N/A	
Daytime Telephone Number 219-926-1952		Daytime Telephone Number	
Fax Number 219-926-9113		Fax Number	
E-mail address (optional) bbaughman@dnr.IN.gov		E-mail address (optional)	
Contact person (required) Brandt Baughman, Property Manager		Contact person	
3. Project / Tract Location			
County Porter		Nearest city or town Chesterton	
U.S.G.S. Quadrangle map name (Topographic map) Dune Acres Quadrangle		Project street address (if applicable) N/A	
Quarter SE 1/4, SE 1/4, SW 1/4	Section 12	Township 37N	Range 6W
Type of aquatic resource(s) to be impacted (Attach Worksheet One.) Dunes Creek		Project name or title (if applicable) Indiana Dunes State Park: Dunes Creek Realignment / Beach Nourishment	
Other location descriptions or driving directions Drive north on Indiana 49 until arriving at Indiana Dunes State Park			
4. Project Purpose and Description (Use additional sheet(s) if required.)			
Has any construction been started? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Anticipated start date (month, day, year) 4/1/2016	
If yes, how much work is completed? N/A			
Purpose of project and overview of activities <p>This request has 2 elements: 1) Dunes Creek Channel Re-Alignment: The daylighted Dunes Creek flows under a box culvert across a recreational beach. When the creek meanders significantly to the east or west, it affects public safety and park operations. We are requesting a permit to mechanically straighten this creek. Generally this needs to occur 2-3 times per year, but it may be needed up to 5-6 times per year in certain instances. Part of this work occurs below the OHWM. 2) Beach Nourishment / Parking Lot Sand Removal: large amounts of beach sand, blown by north winds, accumulate in our adjacent parking lots, which results in a reduction of the amount of sand on the beach and renders our parking lots inaccessible. We are seeking a permit to return this clean, wind-blown sand back to the beach from the hard-surface parking lot. No trash, debris, or foreign material is returned to the beach. Generally, this occurs in earnest only one time per year, which is in the spring after winter winds have filled the lots with sand. However, periodic maintenance (up to 10 times per year) occurs year-round to capture and return smaller amounts of sand as weather events dictate the need.</p> <p>We have attached a narrative on the following page to explain the necessity in greater detail.</p>			

Indiana Dunes State Park Dunes Creek Project Description 2016

As shown on the attached plans, the applicant proposes to dredge (via mechanical means) a maximum of 500 cubic yards of material from an area of the Dunes Creek outlet channel, measuring approximately 170' long x 30' wide to a depth of 3' based on IGLD 1985. The applicant proposes to sidecast the material, for use as beach nourishment, into a (presently, as of 01/31/2016) 8' long x 100' wide area waterward of the Ordinary High Water Mark (OHWM) of Lake Michigan (approximately 90+% of the dredged sand will be sidecast above the OHWM). The work is proposed to occur on an "as-needed" basis, up to the 500 cubic yards per year limit, when the meandering of the Dunes Creek channel outlet affects use of the beach.

Additionally, the applicant proposes to remove approximately 25,000 cubic yards of clean wind-blown sand from an upland parking lot (hard-surfaced) on the park property and discharge a small portion of that material, for use as beach nourishment, into an 8' long x 800' wide area (presently, as of 01/31/2016) waterward of the OHWM of Lake Michigan (approximately <10% of the total removed sand will go below the OHWM, the remaining 90+% coming out of the parking lot will nourish above the OHWM). The work is proposed to occur on an annual or "as-needed" basis, up to the 25,000 cubic yard per year limit.

The purpose of the proposed work is to realign and straighten the Dunes Creek channel outlet when beach access is affected, to remove wind-blown sand from the parking lots on site, and to perform beach nourishment.

The property will keep the impacts of this project to a minimum. We understand that it is often beneficial for a creek to meander, but in extreme cases (such as it is now—the stream meanders westward for nearly several hundred feet and is approaching the wall in front of the historic pavilion), public safety and property operations suffer. Regarding public safety:

1. The lifeguard stands are separated from the lake by the creek, impeding access for water rescue.
2. We do not allow patrons to swim or play in the creek due to E coli concerns. The length of the creek can quintuple when meandering, making enforcement of this rule very difficult.

Operationally, the creek naturally divides our beach into 2 halves (East & West) when it runs straight to the lake. This generally allows one half of the beach to remain open when there are E coli exceedences (per IDEM BEACH Act standards), since the current often dictates where the exceedence occurs (currents out of the east cause an exceedence on the west and vice versa). When the stream has meandered far to the east, for example, it effectively eliminates the option of keeping a portion of the beach open because 90%+ of the swimming beach is then west of the outlet. The opposite is true when it meanders too far to the west, as is presently the case.

5. Avoidance, Minimization, and Mitigation Information: Applicants must answer all of the following questions

(Use additional sheet(s) if necessary - provide a detailed response to all applicable questions.)

A. For projects with Class II isolated wetlands –

1. Is there a reasonable alternative to the proposed activity?
No--the parking lots will be inaccessible and the creek meander will affect operations and visitor safety

2. Is the proposed activity reasonably necessary or appropriate?
Yes--for visitor safety and access

B. For projects with Class III wetlands, adjacent wetlands, and/or streams, rivers, lakes or other water bodies –

1. Is there a practicable alternative to the proposed activity?
No--the parking lots will be inaccessible and the creek meander will affect operations and visitor safety

2. Have practicable and appropriate steps to minimize impacts to water resources been taken?
Yes

Describe all compensatory mitigation required for unavoidable impacts.

We will dredge and sidecast the minimum amount of sand required to straighten the creek. No new material is being added, nor is any being removed. We propose to simply cut a straight channel across the sand beach to improve visitor safety and access. Normal wind activity will re-distribute beach sand outside of the proposed sidecast area. For the beach nourishment project, we are returning clean sand blown from the beach (onto a hard-surface parking lot) back to the beach to maintain visitor access to the parking lots.

6. Drawing / Plan Requirements (Applicants must provide the following.)

- a. Top/aerial/overhead views of the project site showing existing conditions and proposed construction.
- b. Cross sectional view of areas of fill or alterations to streams and other waters.
- c. North arrow, scale, property boundaries.
- d. Include wetland delineation boundary *(if applicable)*. Label all wetlands (jurisdictional, isolated and exempt) as I-1, I-2, I-3, etc. and the mitigation areas as M-1, M-2, etc.
- e. Location of all surface waters, including wetlands, erosion control measures, existing and proposed structures, fill and excavation locations, disposal area for excavated material, including quantities, and wetland mitigation site *(if applicable)*.
- f. Approximate water depths and bottom configurations *(if applicable)*.

7. Supplemental Application Materials (Applicants must provide the following.)

- a. A wetland delineation of all wetlands on the project site *(for projects with wetland impacts)*.
- b. At least three photographs of the project site. Indicate the photo locations on the project plans.
- c. If isolated wetlands are present, a letter from the Corps of Engineers verifying this statement.
- d. Wetland mitigation plan and monitoring report.
- e. Classification of all isolated wetlands on the tract *(if isolated wetlands are present onsite)*.
- f. Copies of all applicable local permits and/or resolutions pertaining to the project or tract.
- g. Tract history *(see instructions)*.

8. Additional information that MAY be required (IDEM will notify you if needed.)

- a. Erosion control and/or storm water management plans.
- b. Sediment analysis.
- c. Species surveys for fish, mussels, plants and threatened or endangered species.
- d. Stream habitat assessment.
- e. Any other information IDEM deems necessary to review the proposed project.

9. Permitting Requirements

a. Does this project require the issuance of a Department of the Army Section 404 Permit from the US Army Corps of Engineers? ☒ Yes ☐ No
If no, you do not need to answer Part b.

b. Have you applied for an Army Corps of Engineers Section 404 permit? ☒ Yes ☐ No

If yes, please supply the Corps of Engineers ID Number, the Corps of Engineers District, the project manager, and a copy of any correspondence with the Corps. **If no, contact** the Army Corps of Engineers regarding the possible need for a permit application.

The USACE application was submitted on 01/12/2016. Andrew Blackburn (Chicago District) visited the property to review the project on 01/26/2016

c. Have you applied for, received, or been denied a permit from the Department of Natural Resources for this project? ☒ Yes ☐ No

Please give the permit name, permit number, and date of application, issuance or denial.

Our current permit (FW-26085) expires on 05/24/2016 and we are applying for renewal on 01/31/2016

d. Have you applied for, received, or been denied any other federal, state, or local permits, variances, licenses, or certifications for this project?

☐ Yes ☒ No

Please give the permit name, agency from which it was obtained, permit number, and date of issuance or denial.

10. Adjoining Property Owners and Addresses

List the names and addresses of landowners adjacent to the property on which your project is located and the names and addresses of other persons (or entities) potentially affected by your project. Use additional sheet(s) if required.

Name Indiana Dunes National Lakeshore Address (number and street) 1100 North Mineral Springs Rd. City Porter State IN ZIP Code 46304	Name Address (number and street) City State ZIP Code
Name Address (number and street) City State ZIP Code	Name Address (number and street) City State ZIP Code
Name Address (number and street) City State ZIP Code	Name Address (number and street) City State ZIP Code
Name Address (number and street) City State ZIP Code	Name Address (number and street) City State ZIP Code
Name Address (number and street) City State ZIP Code	Name Address (number and street) City State ZIP Code
Name Address (number and street) City State ZIP Code	Name Address (number and street) City State ZIP Code

11. Signature - Statement of Affirmation

I certify that I am familiar with the information contained in this application and, to the best of my knowledge and belief, such information is true and accurate. I certify that I have the authority to undertake and will undertake the activities as described in this application. I am aware that there are penalties for submitting false information. I understand that any changes in project design subsequent to IDEM's granting of authorization to discharge to a water of the state are not authorized and I may be subject to civil and criminal penalties for proceeding without proper authorization. I agree to allow representatives of the IDEM to enter and inspect the project site. I understand that the granting of other permits by local, state, or federal agencies does not release me from the requirement of obtaining the authorization requested herein before commencing the project.

Applicant's Signature: _____



Date: 01/31/2016

(mm/dd/yyyy)

Print Name: Brandt Baughman

Title: Property Manager

Worksheet – Summary of Onsite Water Resources and Project Impacts

A. Jurisdictional Wetlands (Existing Conditions)		Jurisdictional Wetlands (Proposed Impacts)			
Wetland Type	Size of wetland (acreage)	To be Impacted?	Acreage	Fill quantity (cys)	ATF
<input type="checkbox"/> EM <input type="checkbox"/> SS <input type="checkbox"/> FO		<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> EM <input type="checkbox"/> SS <input type="checkbox"/> FO		<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> EM <input type="checkbox"/> SS <input type="checkbox"/> FO		<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> EM <input type="checkbox"/> SS <input type="checkbox"/> FO		<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> EM <input type="checkbox"/> SS <input type="checkbox"/> FO		<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> EM <input type="checkbox"/> SS <input type="checkbox"/> FO		<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> EM <input type="checkbox"/> SS <input type="checkbox"/> FO		<input type="checkbox"/> Yes <input type="checkbox"/> No			

Describe the type and composition of fill material to be placed in wetlands on the project site:

Describe the type and composition and quantity (*cubic yards*) of material proposed to be dredged or excavated from wetlands on the project site:

B. Isolated Wetlands (Existing Conditions)		Isolated Wetlands (Proposed Impacts)				
Wetland Class	Type	Size of wetland (acreage)	To be Impacted?	Acreage	Fill quantity (cys)	ATF
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> NF <input type="checkbox"/> F		<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> NF <input type="checkbox"/> F		<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> NF <input type="checkbox"/> F		<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> NF <input type="checkbox"/> F		<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> NF <input type="checkbox"/> F		<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> NF <input type="checkbox"/> F		<input type="checkbox"/> Yes <input type="checkbox"/> No			

Describe the type and composition of fill material to be placed in isolated wetlands on the project site:

Describe the type and composition and quantity (*cubic yards*) of material proposed to be dredged or excavated from isolated wetlands on the project site:

C. Bridges and Stream Crossings - provide the following information for EACH structure (Use additional sheet(s) if required.)	
Stream name	
Description of impacts	
Length of upstream bank impacts:	
Left side:	Right side:
Length of downstream bank impacts:	
Left side:	Right side:
Bank protection fill placed below the Ordinary High Water Mark:	Volume per running foot:
Bank protection fill placed below the Ordinary High Water Mark:	Area of coverage:

D. Bank Stabilization – provide the following information for EACH segment (Use additional sheet(s) if required.)

Water body name

Description of impacts

Length of shoreline or bank protection

Volume (*cubic yards*) of bank protection fill placed below the Ordinary High Water Mark per running footArea (*square feet*) of bank protection fill placed below the Ordinary High Water Mark**E. Stream Relocation**

Water body name

Dunes Creek

Description of impacts

Straightening of channel across beach for public safety and improved access

Length of existing channel to be relocated (*linear feet*)

255

Length of new channel to be constructed (*linear feet*)

170' (maximum)

Existing channel to be backfilled?

☐ Yes ☒ No

Type of relocation

☐ Piping ☒ Open ☐ Channel ☐ Other: _____Type of fill and volume (*cubic yards*)

N/A: normal sand and wind activity will fill the channel

F. Open Water Fill

Water body name

Description of impacts

Area of water body to be filled (*acres*)Type of fill and volume (*cubic yards*)

Notes and Instructions for Authorization to Discharge Dredged or Fill Material to a State Regulated Wetland and/or Waters of the State Permit Application Form and Worksheet

Note to applicants:

This form is to be used by all persons who intend to discharge dredged or fill materials into wetlands, isolated wetlands, or any other water body regulated under state and federal law. Specifically, this form is to be used for the following:

1. Application for Section 401 Water Quality Certification for any project not covered by the Indiana Regional General Permit
2. Application for a State Regulated Wetland Permit authorized under HEA 1798 and HEA 1277, excluding any activities authorized under any of the State Regulated Wetland General Permits

Consult the Office of Water Quality Web site for information on the types of authorizations and requirements for projects regulated under these laws.

<http://www.in.gov/idem/wetlands/index.htm>

Do not submit this form until you are familiar with the various authorizations and proper forms for obtaining these authorizations. An application submitted on the incorrect form may result in delays in processing.

Applicants should also contact the Indiana Department of Natural Resources (DNR) regarding potential permit requirements associated with construction in a floodway or a public freshwater lake. You can reach the DNR Division of Water at (317) 232-4160 or toll free at (877) WATER-55.

Instructions for Completing the Application and Worksheet

Address all applications or questions to:

Indiana Department of Environmental Management
Office of Water Quality
Section 401 Water Quality Certification/State Isolated Wetlands Program
100 North Senate Ave.
Indianapolis, Indiana 46204

Telephone: (800) 451-6027 or (317) 233-8488

Print clearly or type.

Attach additional 8.5" x 11" sheets as necessary.

APPLICATION

Note: Some wetland activities may impact both U.S. navigable waters and state regulated isolated wetlands. In those situations, the project will require a Section 401 Water Quality Certification and Section 404 U.S. Corps of Engineers permit AND approval under the new State Isolated Wetland Regulatory Program. When IDEM receives an application that involves an activity that may impact both intrastate navigable waters and a state regulated wetland, current state law requires that we evaluate each activity using different authorities. IDEM will, at the request of an applicant, evaluate a project with multi-jurisdictional wetlands under the Section 401 certification framework and will provide one authorization for the project, applying the state regulated isolated wetlands law and federal Clean Water Act Section 401 authorities. If an applicant prefers that all IDEM approvals occur within one streamlined review process, a separate letter specifically requesting a combined review of the entire project should be submitted concurrently with the application.

Block 1 - Applicant Information

Provide your name, address, and telephone number. You **MUST** provide a contact name. For complex projects or projects with multiple contractors and responsible parties, designation of a single point of contact will speed up the review process and enable more timely responses to requests for information.

Block 2 - Agent Information

If you choose to be represented by an agent, provide the agent's address and telephone information. You are not required to have an agent.

Block 3 - Project Location

Provide specific information relating to the location of your proposed project. Provide accurate maps depicting the project location. Try to keep detail on maps to a minimum, focusing instead on the location of structures and associated water bodies. Consult the USGS Quadrangle maps for information on the quarter, section, township and range of the project. IDEM may require that you submit full size plans to supplement the 8 1/2" by 11" map sheets if the project is large or complex.

Block 4 - Project Purpose and Description

Provide the proposed or actual start date and the anticipated completion date. If you have started your project before obtaining authorization, you may be in violation of federal and/or state law. Give a narrative description of the proposed project. You should include any supplemental environmental reports, assessments, or other documents that explain or justify the proposed configuration of the project. Describe the purpose of the project (that is, what goal or outcome will be met by the construction of the project).

Block 5 - Avoidance, Minimization, and Mitigation Information

You must describe possible alternatives to the proposed project that would avoid impacts to the aquatic resource that were considered during the project planning process. You must also describe ways to minimize impacts considered during the project planning process, including a description of how you plan to contain any dredged/excavated material to prevent re-entry into waterways or wetlands. Examples of alternatives include construction on the upland portions of the property; rerouting a roadway to avoid a wetland; or alternate design plans. Minimization of the impacts may decrease any mitigation requirements that might otherwise apply. Minimization may include reduction of the amount of dredging, filling, or vegetative clearing. For isolated wetlands only, enclosure of a copy of (1) a resolution of the executive of the county or municipality in which the wetland is located or (2) a permit or other approval from a local government entity having authority over the proposed use of the property on which the wetland is located; that includes a specific finding that the wetland activity is part of a legitimate use proposed by the applicant on the property, substitutes for the information required on avoidance and minimization.

Answer all the questions in detail, providing example, drawings, or other supporting information to illustrate the steps taken to consider alternatives. Provide reasons why various alternatives were or were not considered.

In general, all impacts to wetlands or other waters that require the use of this form will require some form of compensatory mitigation. A detailed description of the mitigation plan must be provided, including: the location of the mitigation site, the size and type of mitigation to be performed, the construction sequence, timing of the mitigation, information on post construction monitoring, mitigation techniques, and success criteria of the mitigation site. A mitigation plan, with overview drawings, planting lists, cross sectional views, and other relevant information is recommended as a supplement to answer this question.

Block 6 - Drawing/Plan Requirements

You must submit drawings/plans that are on 8 1/2 by 11 inch sheets. Your project will be delayed if these materials are not submitted in the formats specified in the application.

Block 7 - Supplemental Application Materials

All projects involving impacts to wetlands must be accompanied by a wetland delineation using the procedures established in the U.S. Army Corps of Engineers Wetland Delineation Manual, Technical Report Y-87-1 (January 1987). This delineation must be approved or reviewed by the Corps of Engineers in order for IDEM to determine the impacts to water bodies associated with the project. DO NOT submit an application involving impacts to wetlands without a wetland delineation. For projects that involve impacts to isolated wetlands, a letter from the Corps of Engineers that specifically makes this determination must be provided or the application will not be processed. Submittal of photographs depicting the project site is highly encouraged. Photos must be clearly labeled with the direction of the shot, the area depicted, and notes on relevant features. A map depicting the location of photos on the project site is also useful and should be included whenever photos are submitted.

For project sites with isolated wetlands, a tract history is also required. This history provides information on all the wetlands on the site prior to January 1, 2004, and describes any and all activities within these wetlands, including impacts allowed to wetlands exempt from regulation under the various provisions of federal and state law. Direct questions regarding this requirement to IDEM staff for clarification.

Block 8 - Additional Information That May Be Required

You are not required to submit the information specified in this section unless directed to do so by IDEM. However, you may submit the information if you anticipate that such information will be required. For example, if you are aware of issues on the proposed project site which may impact water resources, such as the presence of contaminated soils or sediments, endangered species, well field protection areas, or previously permitted activities on the project site, information regarding these points must be submitted with the certification application.

Block 9 - Permitting Requirements

Provide information regarding your application to the Corps of Engineers. If you have not yet contacted the Corps of Engineers, you must do so as soon as possible (SEE BLOCK 7). Provide information regarding any other federal, state, or local permits, variances, licenses, or certifications required for your project. Please indicate whether they were approved, denied, or are pending.

Block 10 - Adjoining Property Owners and Addresses

List the names and addresses of landowners adjacent to the property on which your project is located. Adjacent property owners are persons who share property lines with your property. Inclusion of names and addresses of other persons (or entities) potentially affected by your project must include persons within your neighborhood, lake association, or in the general vicinity that may have an interest in your project. Consult with IDEM for further clarification.

Block 11 - Signature - Statement of Affirmation

You must sign and date the application. If the applicant is a corporation, a responsible person from that corporation must sign. No other signatures will be accepted. The application will not be processed without the appropriate signature.

WORKSHEET

Note: When calculating any type of impact, all areas that are affected by placement of fill, bank armoring, culverting, excavation, or any other activity must be counted. When calculating open water impact, all areas within lakes, rivers, streams and the like must be counted. This includes areas under new bridge piers, beaches, and boat ramps, as examples. The Ordinary High Water Mark means that line on the shore of a water body established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, natural destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

- Fill out only the sections of this worksheet that apply to your project. -

Section A - Wetlands

This section is for wetlands determined to be under the jurisdiction of the U.S. Army Corps of Engineers (Corps) and that require a Section 404 permit as well as a Section 401 Water Quality Certification from IDEM. List the type of wetland as Emergent (EM), Scrub shrub (SS), or Forested (FO). "Emergent wetland" means a wetland characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. "Scrub shrub wetland" means a wetland dominated by woody vegetation having a height greater than three and two-tenths (3.2) feet, and a stem diameter less than three (3) inches. This includes true shrubs, young trees, and trees and shrubs stunted by environmental conditions. "Forested wetland" means a wetland dominated by woody vegetation that has a diameter, at breast height, greater than three (3) inches, regardless of total height. The size of the wetland must be determined by conducting a wetland delineation consistent with the protocols established in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual. The applicant must list whether or not the wetland will be impacted, the acreage of the impact, and the quantity of fill to be discharged into the wetland. The applicant must identify whether or not this is an after-the-fact (ATF) permit. An ATF permit is for impacts to wetlands or other water bodies under the jurisdiction of IDEM that did not receive authorization before the impacts occurred. Additionally, the applicant must describe the type and composition of material proposed to be discharged or removed from the wetland.

Section B - Isolated Wetlands

This section is for wetlands the Corps has determined to be isolated and no longer under their jurisdiction. The Corps jurisdictional determination letter must be included with the application. Isolated wetlands are considered State Regulated Wetlands and proposed impacts to these wetlands will be reviewed pursuant to IC 13-18-22. The class of wetland must be determined by the definitions outlined in IC-13-11-2-25.8. This is determined by assessing the vegetation type,

hydrologic function, habitat functions, values of the wetland, and disturbances to the wetland. The applicant must determine the type of wetland by designating the wetland as either Non-Forested (NF) or Forested (F). The size of the wetland must be determined by conducting a wetland delineation consistent with the protocols established in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual. The applicant must list whether or not the wetland will be impacted, the acreage of the impact, and the quantity of fill to be discharged into the wetland. The applicant must identify whether or not this is an after-the-fact (ATF) permit. An ATF permit is for impacts to wetlands or other water bodies under the jurisdiction of IDEM that did not receive authorization before the impacts occurred. Additionally, the applicant must describe the type and composition of material proposed to be discharged or removed from the wetland.

Section C - Bridges and Stream Crossings

This section is for projects that impact streams in order to construct, maintain, or protect structures used to cross the stream. The applicant must list the name of the stream to be impacted by the proposed project. The stream name can be found on the USGS Topographic map. If the stream does not have a name, identify it as a tributary to the next stream or water body with a name. Describe the proposed impacts in detail. Include the lengths of bank impacts to both banks upstream and downstream. Determination of left and right banks is made in the following manner- at the point furthest upstream on the project site, face downstream - the left bank is on your left and the right bank is on your right. Identify the volume per running foot of material to be discharged below the Ordinary High Water Mark (OHWM). Identify the total area below the OHWM to receive a discharge of fill material.

Section D - Bank Stabilization

This section is for projects that discharge fill material in order to stabilize eroding land along streams, lakes, or other water bodies. The applicant must list the name of the water body to be impacted by the proposed project. The name of the water body can be found on the USGS Topographic map. If the water body does not have a name, identify it as a tributary to the next stream or water body with a name. Provide the length of shoreline or bank impact. Identify the volume per running foot of material to be discharged below the Ordinary High Water Mark (OHWM). Identify the total area below the OHWM to receive a discharge of fill material.

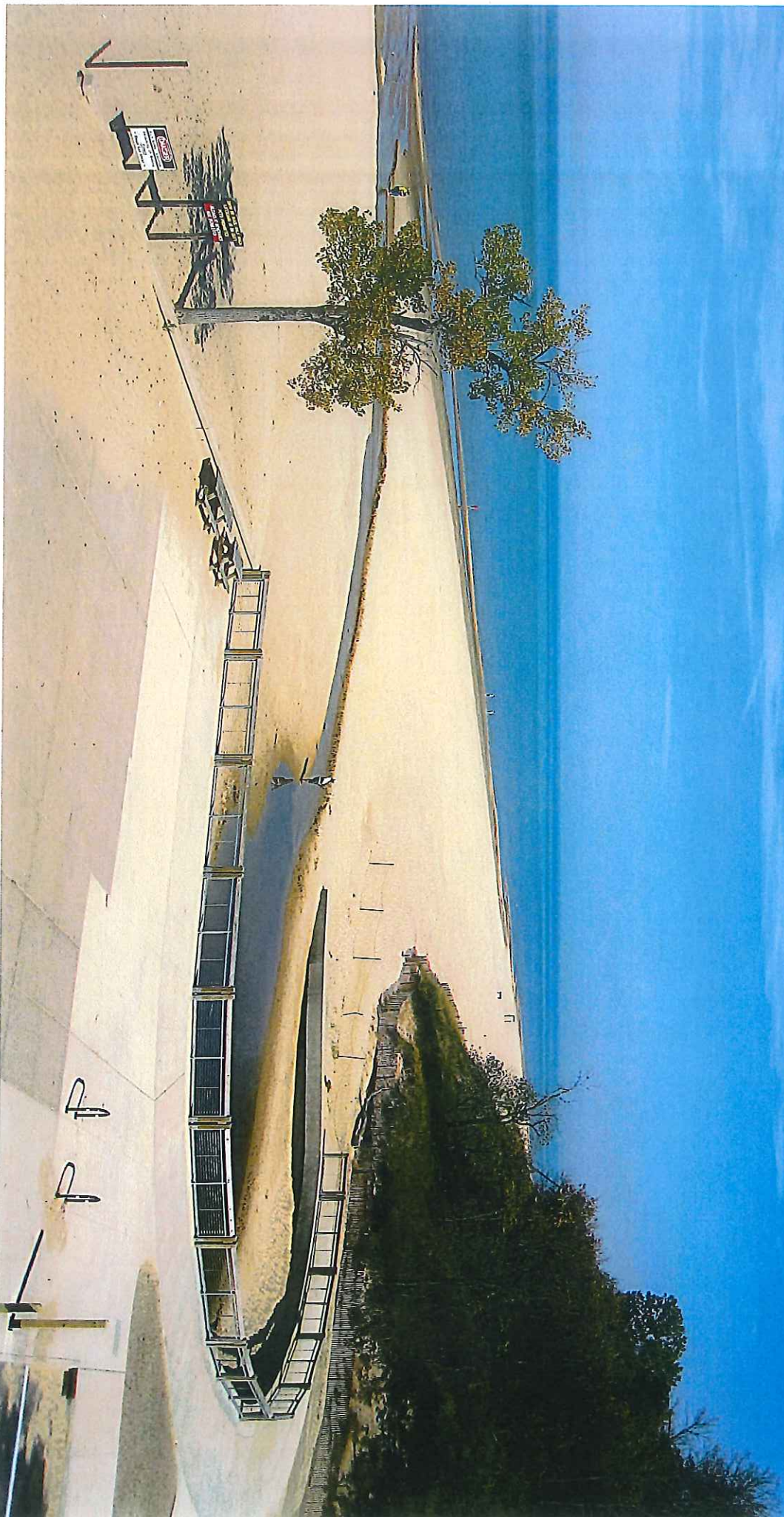
Section E - Stream Relocation

This section is for projects that propose to relocate a stream from its existing banks either by open channel construction or by stream piping. The applicant must list the name of the stream to be impacted by the proposed project. The stream name can be found on the USGS Topographic map. If the stream does not have a name, identify it as a tributary to the next stream or water body with a name. Describe the impacts to the stream. Provide the linear feet of existing channel to be relocated and the length of new channel to be constructed. The applicant must state whether the old channel is proposed to be filled and describe the type and quantity of fill to be used to fill the old channel. The applicant must also provide the type of relocation, new channel or piping.

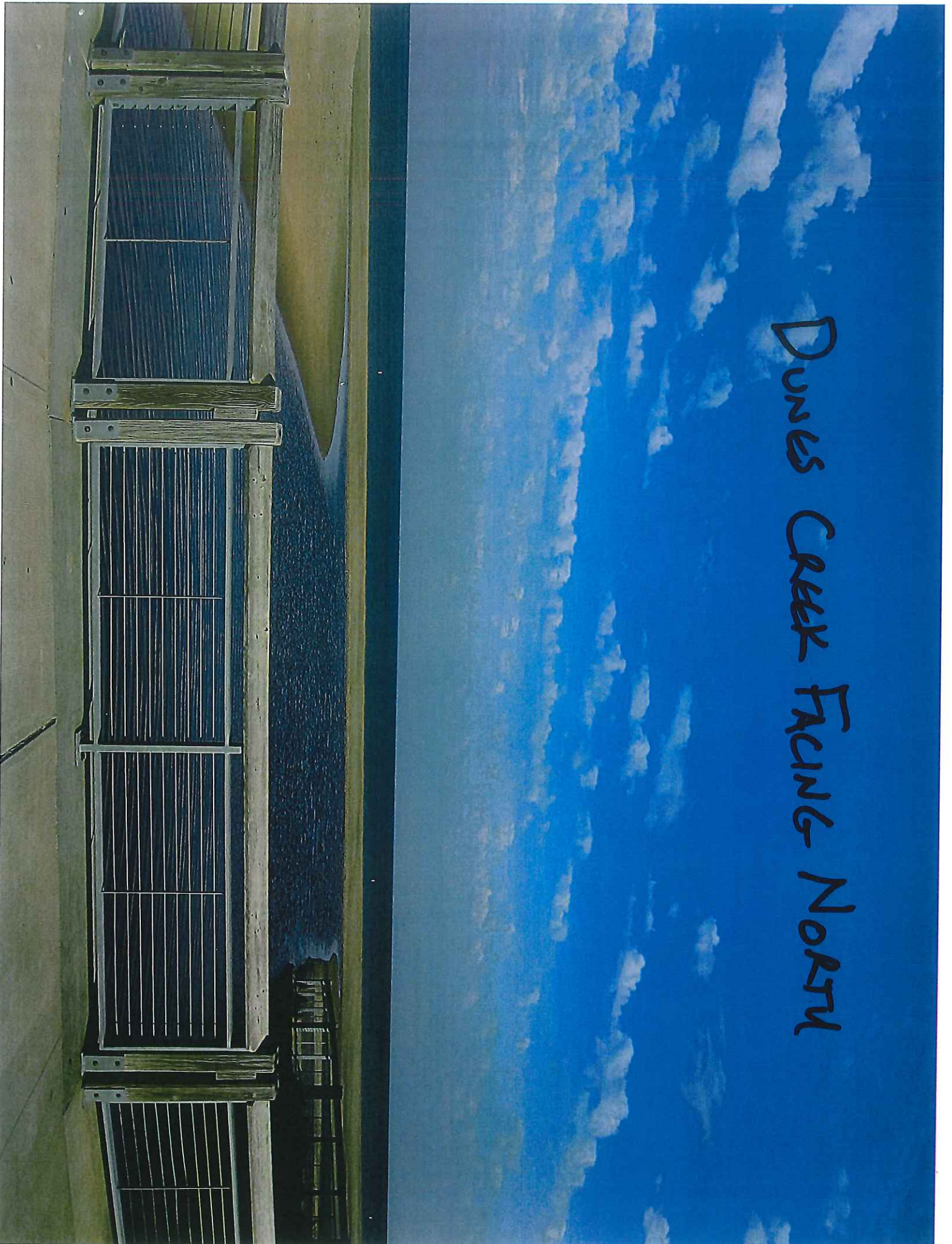
Section F - Open Water Fill

This is for projects where the fill material extends beyond the edge of the shoreline into open water. Some examples include the filling of pit mines, borrow pits, and other land reclamation projects. Provide the name of the water body to be impacted. If the water body does not have a name, identify it as unnamed open water body. Describe the impacts to the water body including the area to be filled and the type and quantity of fill material to be discharged.

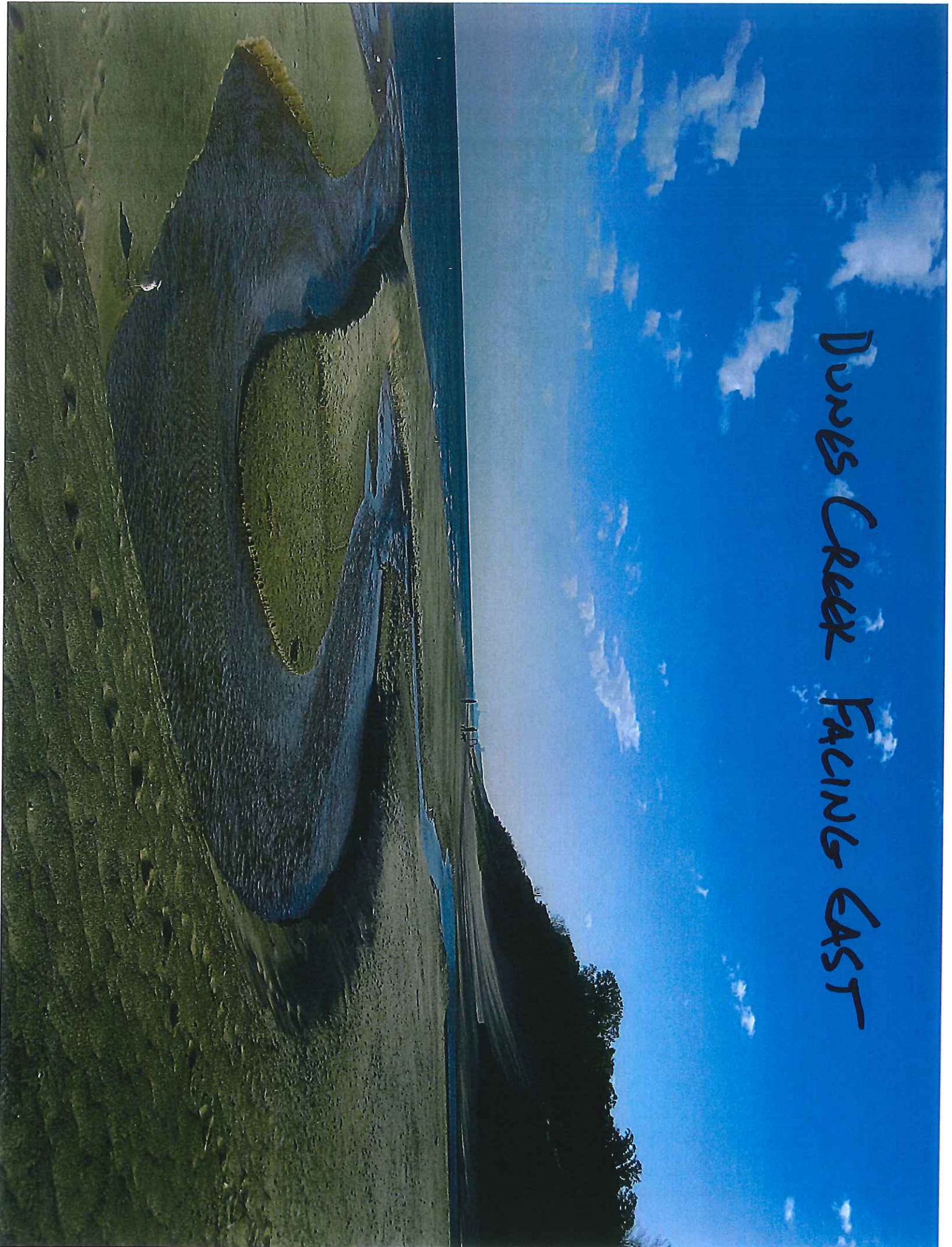
Dunes Creek Duties (w/ STRAIGHTENED Creek)



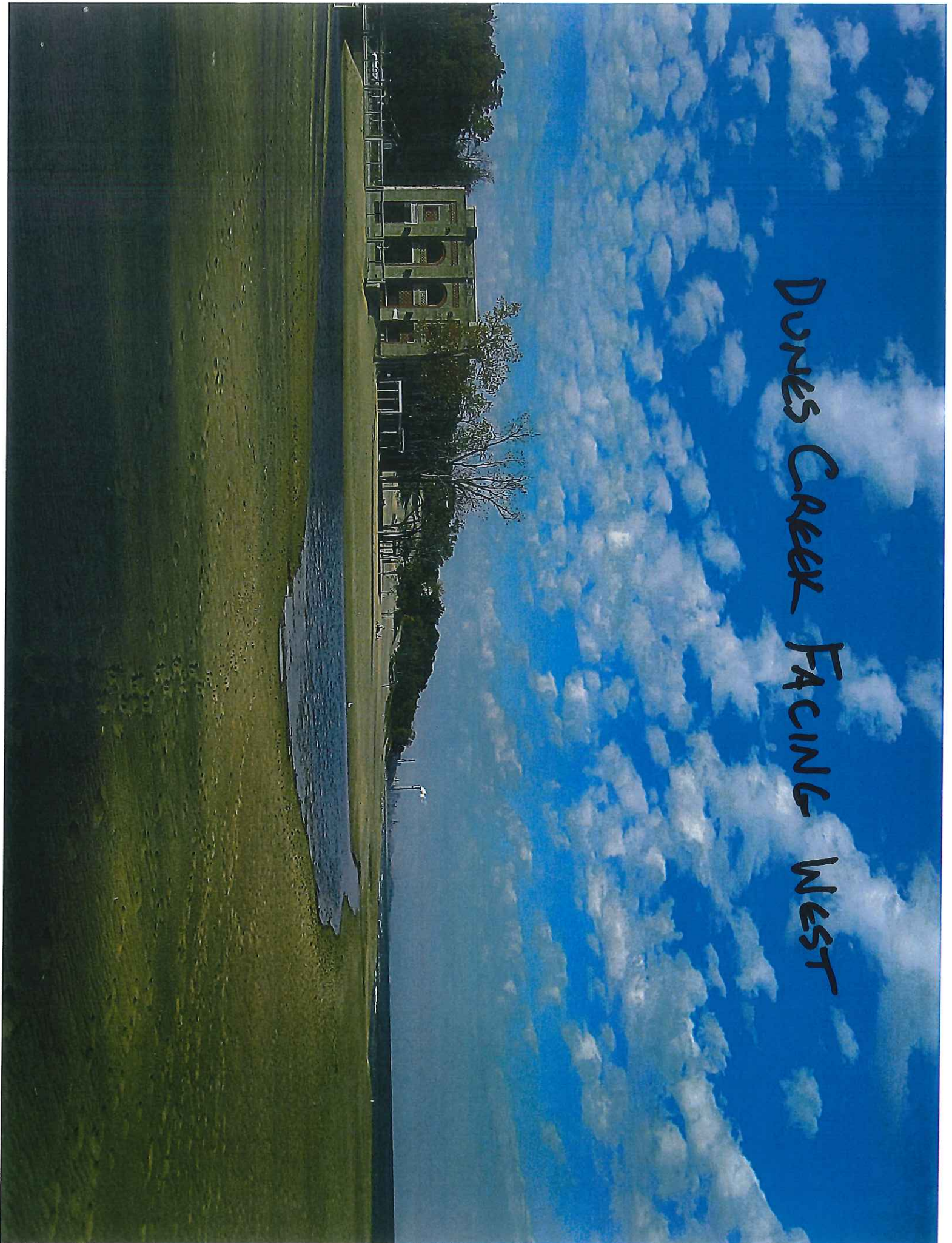
Dunes Creek Facing North



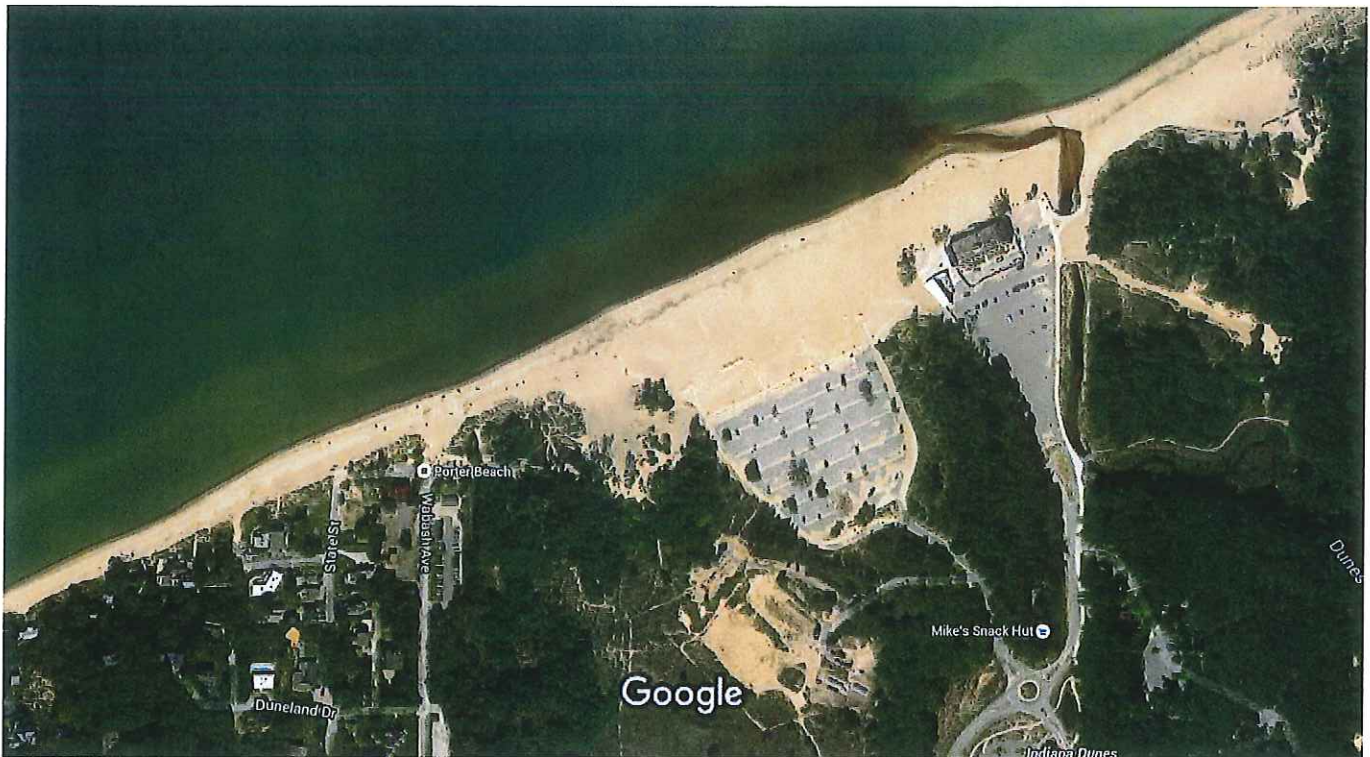
Dunes Creek Facing East



Dunes Creek Facing West



Google Maps Indiana Dunes State Park



Imagery ©2016 Google, Map data ©2016 Google 200 ft



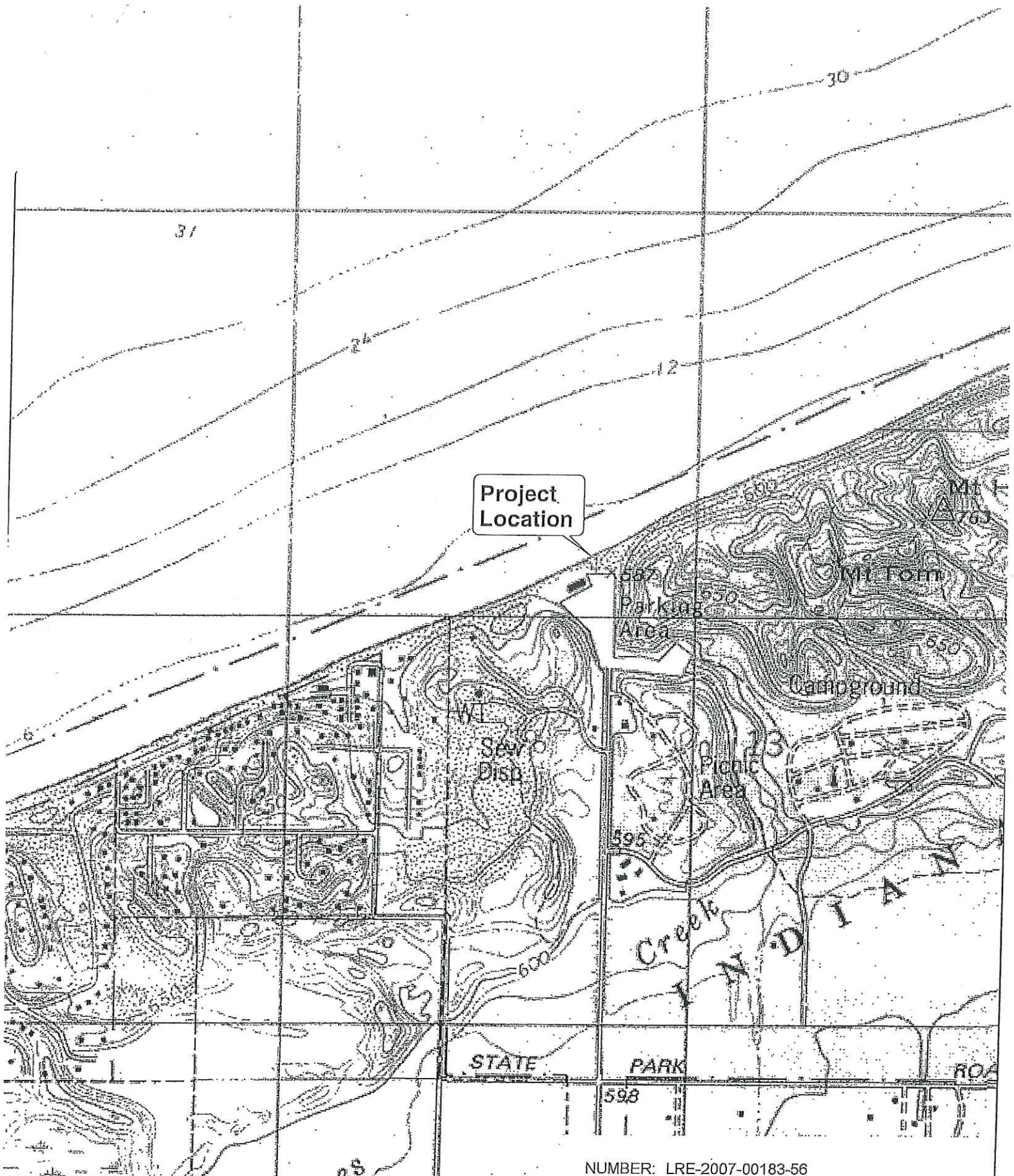
Indiana Dunes State Park

4.4 ★★★★★ 65 reviews

State Park

Dune-lined park for hiking, swimming, fishing, cross-country skiing, birding & more, plus campsites. - Google

1600 N 25 E, Chesterton, IN 46304

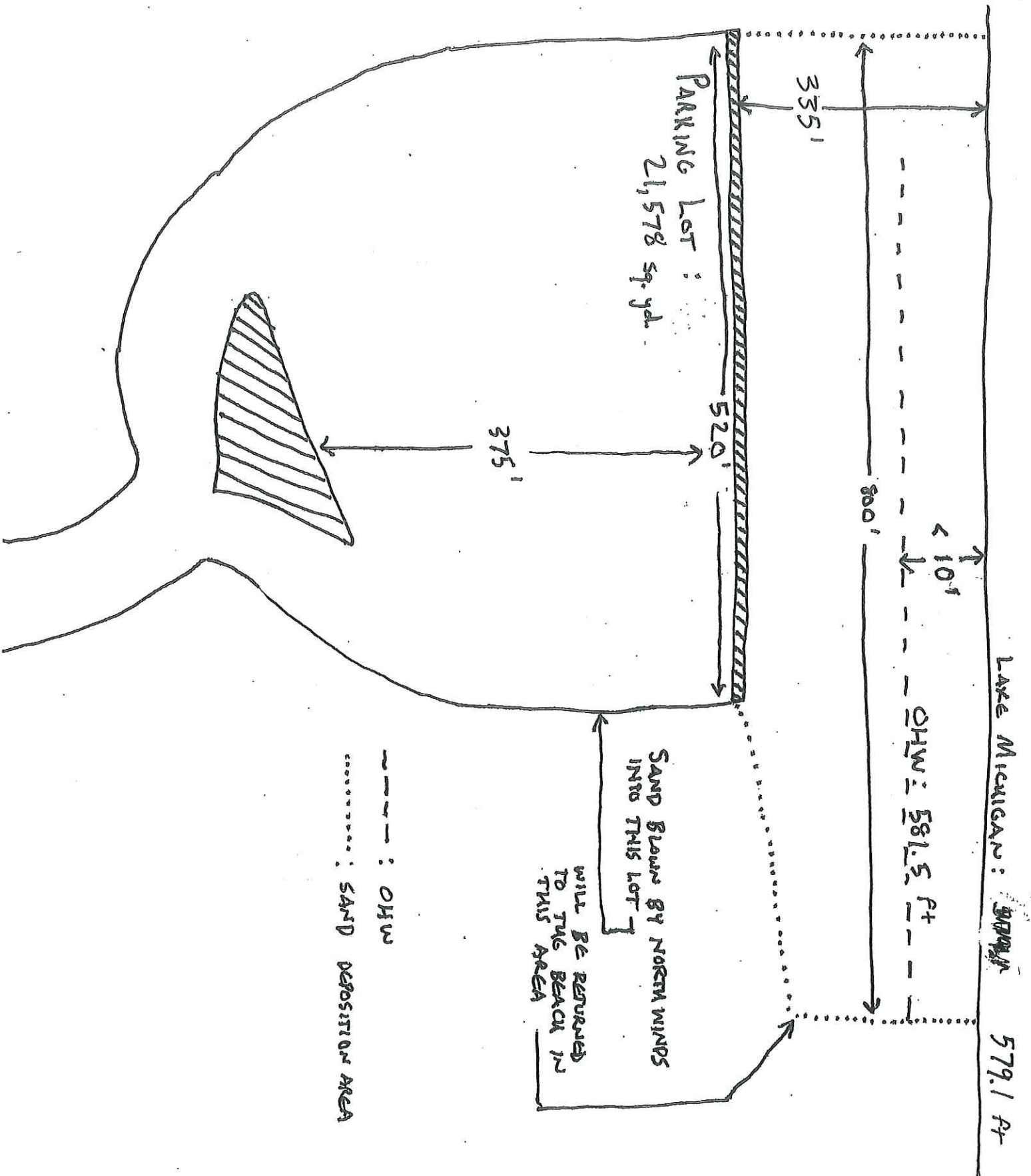


Name: DUNE ACRES
 Date: 11/16/2009
 Scale: 1 inch equals 1000 feet

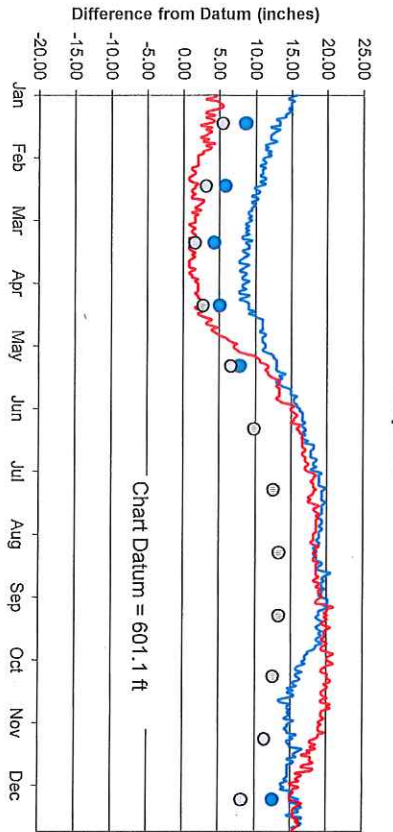
Location:

NUMBER: LRE-2007-00183-56
 Indiana Dunes Dredging, Discharge
 By: Indiana Dunes State Park
 Lake Michigan, Chesterton
 Porter County, Indiana
 SHEET 1 OF 5

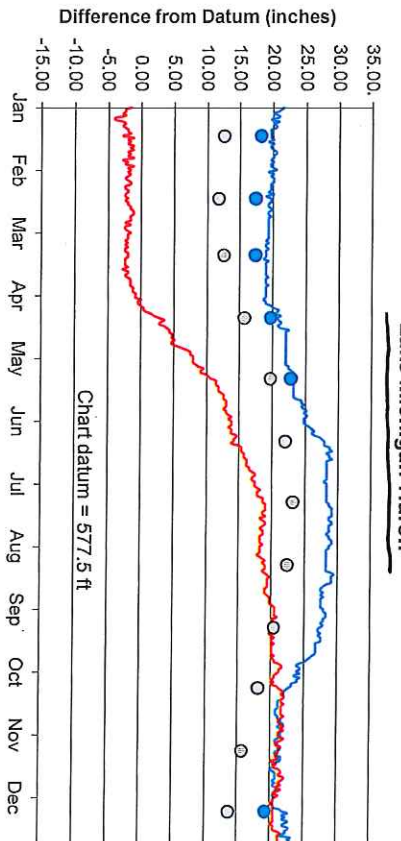
NOT TO SCALE



Lake Superior

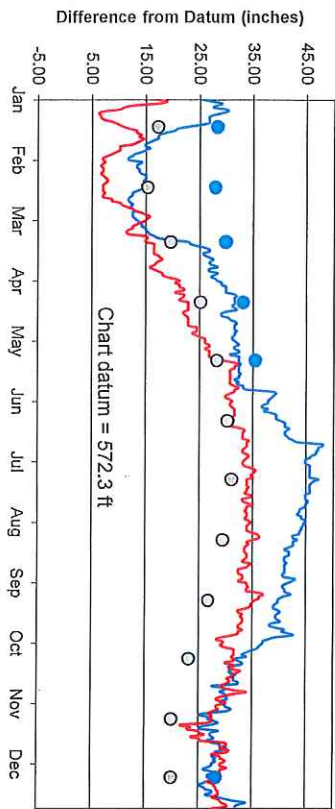


Lake Michigan-Huron

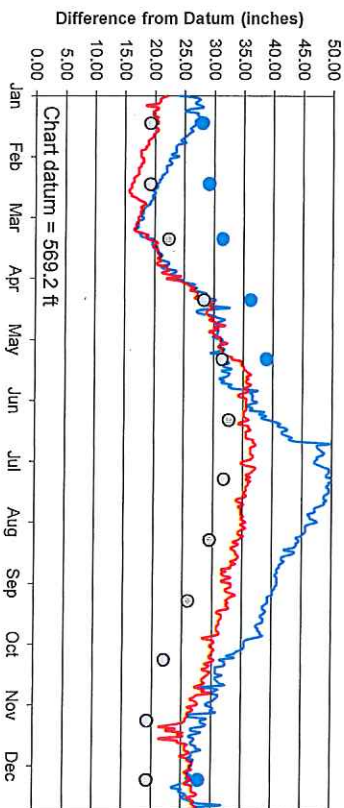


579.1

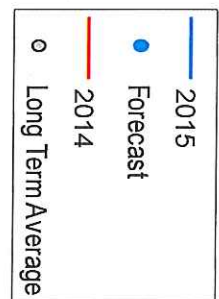
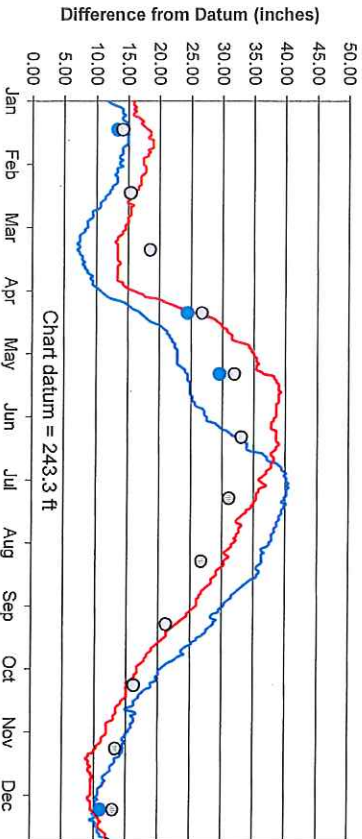
Lake St. Clair



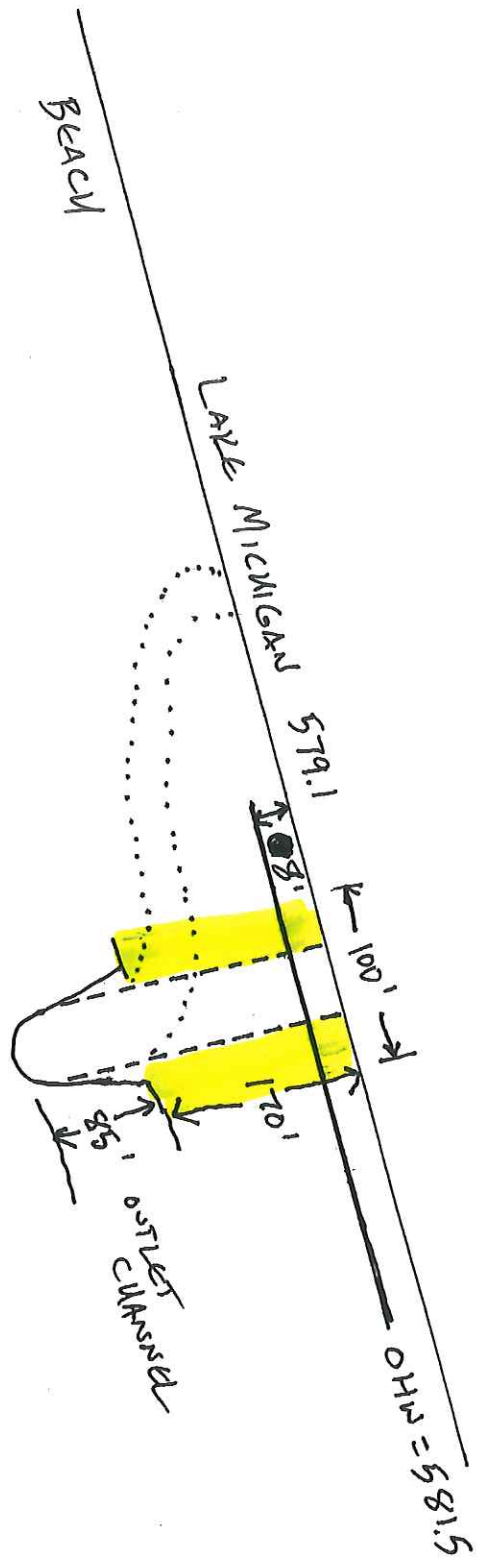
Lake Erie



Lake Ontario



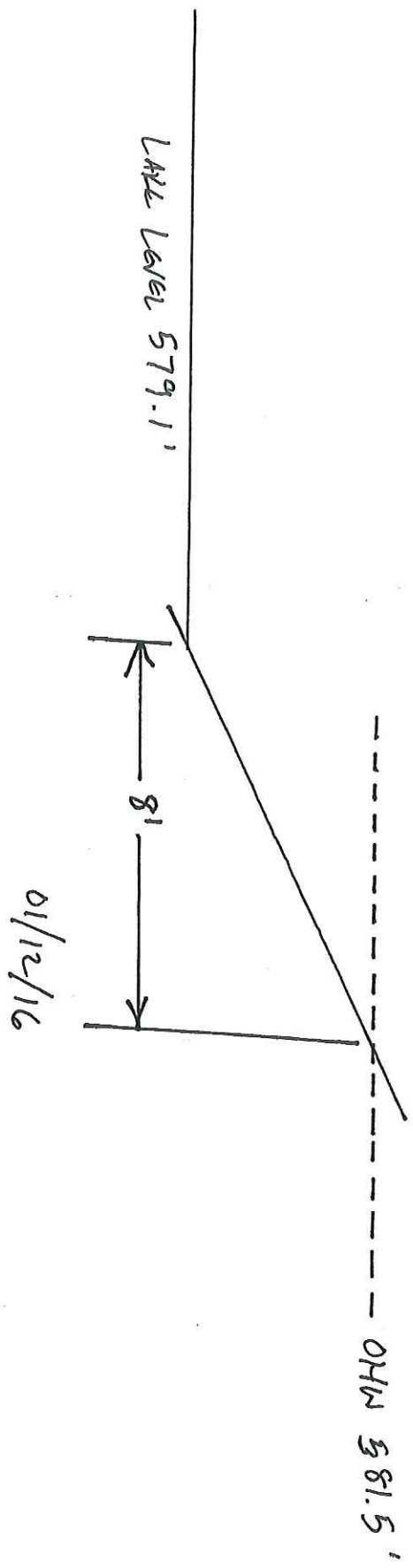
U.S. Army Corps of Engineers
Detroit District
<http://www.lre.usace.army.mil>



--- } = TYPICAL CREEK

..... } = MEANDERED CREEK

[Yellow Box] = SIDECAST AREA



INDIANA DUNES STATE PARK

1600 North 25 East • Chesterton, IN 46304-1142 • (219) 926-1952
2,182 acres Established 1925

Alcoholic beverages are prohibited in Indiana Dunes State Park.

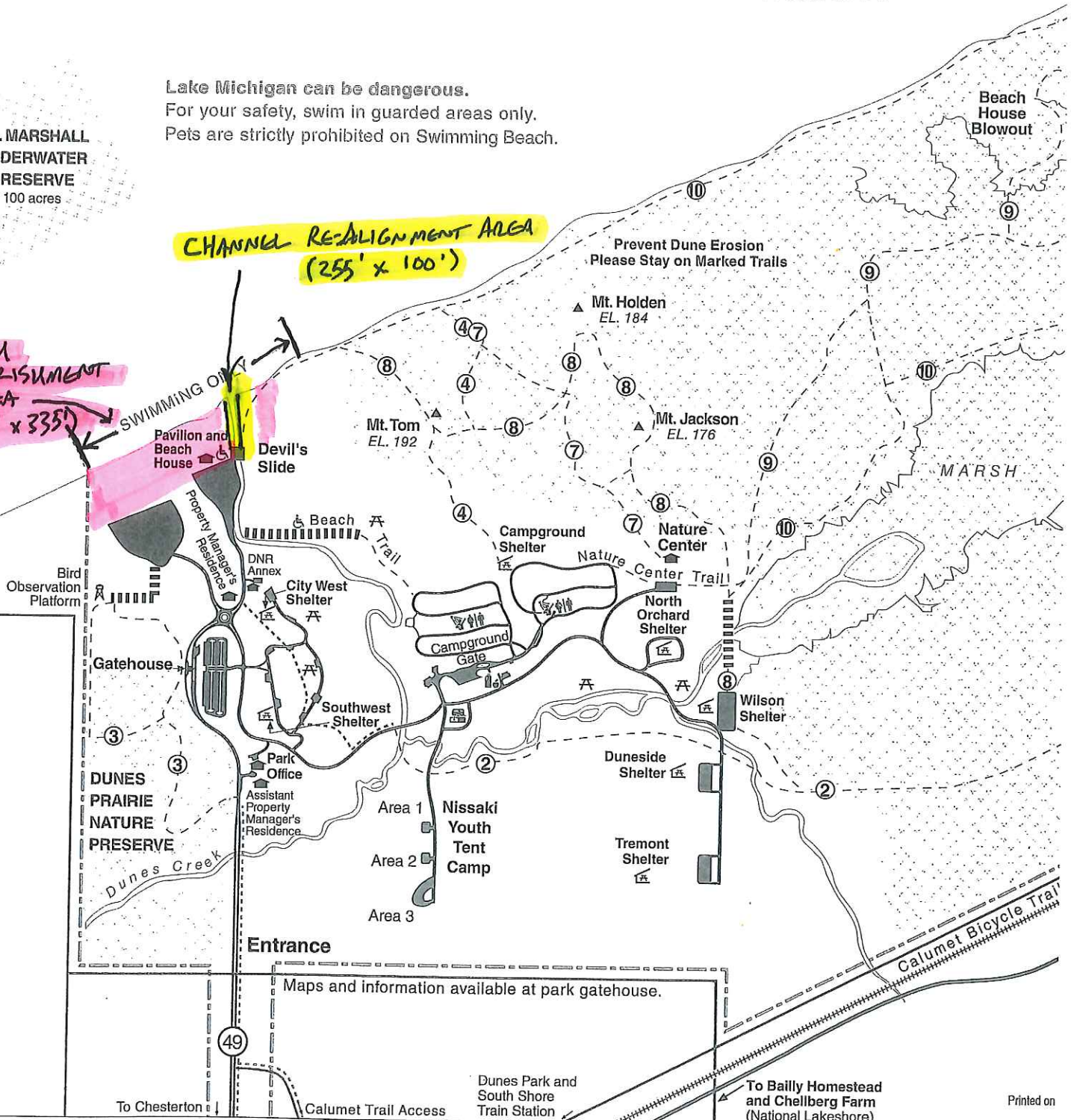
LAKE MICHIGAN

Lake Michigan can be dangerous.
For your safety, swim in guarded areas only.
Pets are strictly prohibited on Swimming Beach.

J.D. MARSHALL
UNDERWATER
PRESERVE
100 acres

CHANNEL RE-ALIGNMENT AREA
(255' x 100')

BEACH
NOURISHMENT
AREA
(1500' x 335')



Entrance

Maps and information available at park gatehouse.

To Chesterton

Calumet Trail Access

Dunes Park and
South Shore
Train Station

To Bailly Homestead
and Chellberg Farm
(National Lakeshore)

Printed on